

Title (en)

Compressor blade of a gas turbine engine with self-sharpening leading edge structure

Title (de)

Verdichterschaufel eines Gasturbinentriebwerks mit selbstschärfender Vorderkantenstruktur

Title (fr)

Aube de compresseur d'une turbine à gaz équipée d'une structure du bord d'attaque autoaiguissante

Publication

EP 2410132 B1 20190612 (DE)

Application

EP 11005950 A 20110720

Priority

DE 102010032097 A 20100723

Abstract (en)

[origin: EP2410132A2] The blade (1) has a strip-shaped component (3) made of wear-resistant material and possessing higher erosion wear resistance than a base material. The component is attached over a partial region of a leading edge (2) in length direction. The component is formed with a rectangular cross-section. The component is arranged on an inflow side of a profile of the blade in a partial area of a sectional surface of an inflow area with reference to a sectional plane perpendicular to radial direction, and forms the flowing front edge. The component is made of titanium aluminides.

IPC 8 full level

F01D 5/28 (2006.01); **F04D 29/02** (2006.01); **F04D 29/32** (2006.01)

CPC (source: EP US)

F01D 5/286 (2013.01 - EP US); **F04D 29/023** (2013.01 - EP US); **F04D 29/324** (2013.01 - EP US); **F05D 2230/232** (2013.01 - EP US); **F05D 2240/303** (2013.01 - EP US); **F05D 2250/12** (2013.01 - EP US); **F05D 2300/161** (2013.01 - EP US); **F05D 2300/174** (2013.01 - EP US); **Y02T 50/60** (2013.01 - EP US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 2410132 A2 20120125; **EP 2410132 A3 20171025**; **EP 2410132 B1 20190612**; DE 102010032097 A1 20120126; US 2012020802 A1 20120126; US 8827654 B2 20140909

DOCDB simple family (application)

EP 11005950 A 20110720; DE 102010032097 A 20100723; US 201113188759 A 20110722